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ABSTRACT

The final phase of a study investigating effective teaching behaviors for mainstreamed students involved 118 elementary teachers. Teachers provided information on mainstreamed students and a sample of students was randomly selected to represent classification categories (learning disabilities, behavior disorders, speech impairments, and hearing impairments). Classroom observations of 33 teaching behaviors and one attitude variable previously identified as characteristic of teachers effective with mainstreamed students were recorded and examined in relationship to student performance measures. Among the results were: (1) that the use of sustaining feedback correlated with social status, academic learning time, and a behavioral factor; and (2) low off task rate, incidence of intervention, and student transition time correlated significantly with reading achievement, academic learning time variables, and a behavior factor. Other teacher variables related to successful performance of mainstream students include responding supportively to students, asking questions which receive correct student responses, and producing a low rate of criticism. (CL)

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**Identification of Teaching Behaviors Which
Predict Success for Mainstreamed Students**

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BACKGROUND

In 1978, the Bureau of Education for the Handicapped funded a Special Project whose goal was to provide training to teachers which would promote the use of teaching behaviors having been determined to positively effect the mainstreamed child's performance in the regular classroom setting. This project entailed a three-level validation process. The first phase encompassed the identification of those teaching behaviors characteristic of teachers effective with mainstreamed students. Phase two involved the development of training materials designed specifically to foster the acquisition of those desired teaching behaviors identified in the initial phase. The final phase was intended to validate that use of the effective teaching behaviors would result in the expected performance of the mainstreamed child.

During Phase I, the operational plan for the project called initially for the selection of regular classroom teachers who had previously demonstrated their effectiveness with special needs students functioning in the regular classroom setting. Teachers were selected based on the actual performance of special needs students in their classrooms. Students were assessed on a pre-post basis on academic, behavioral, social, and attitudinal variables. A series of criteria were established considering gains made by special needs students as well as gains made by the class at large for selection purposes. From an original data base of 33 elementary classrooms, 12 teachers were identified as effective. (The procedure for identification of the effective teachers is described in Larrivee 1979a, 1980a.)

Subsequently, more than 20 classroom observations were conducted in each of the classrooms of the identified teachers in an effort to isolate characteristic teaching behaviors. Following a comprehensive review process, over 70 teaching variables which had been found to correlate with student performance outcomes based on previous research findings were identified for inclusion in the study. Four modes of data collection were employed: direct classroom observations, teacher daily records, teacher self-report, and teacher and student interviews. Sixteen instruments were developed to provide the data necessary to assess all of the selected variables (Larrivee, 1979b).

Ultimately 42 of the teaching behaviors were determined to be characteristic of teachers effective with mainstreamed students. Several reports and papers provide detailed descriptive information on the identified teacher variables, presenting the specific variables identified, data tables, summary charts, and a descriptive teacher profile (Larrivee & Vacca 1979, 1980; Larrivee, 1980b, 1982).

INTRODUCTION

The purpose of this paper is to describe the final phase which was intended to provide further evidence for the previously identified effective teaching behaviors for mainstreaming. The results of the initial phase of the research were based on extensive study of the classrooms of 12 carefully selected teachers who had demonstrated their effectiveness with mainstreamed students. Since only effective teachers were studied, it was not possible to make direct comparisons with ineffective teachers. Thus, there is no assurance that the

identified characteristics actually distinguish successful from unsuccessful teachers. Therefore, a large sample of 118 teachers was earmarked for study in the final stage in an attempt to determine which dimensions of teaching are related to the performance of mainstreamed students.

PROCEDURE

Teacher Sample Selection

At the onset of the school year, letters were sent to school administrators informing them of the project's goals and requesting participation. Several meetings were scheduled to explain the project to interested local school administrators as well as classroom teachers. Administrators were asked to have teachers who were willing to participate complete a data sheet providing information relative to their mainstreamed students. This data was compiled and personal contacts were made to all teachers confirming their participation. This process identified 130 teachers; ultimately 118 of these teachers completed their participation in the project. Project participation involved classroom observations and completion of a variety of data gathering instruments. A small stipend was offered as well as feedback based on the data collected.

Teacher Sample Description

Participating teachers taught in public elementary schools in kindergarten through grade six. Sixty-two teachers taught in the primary grades and 56 taught in grades four through six. The mean number of years teaching was 15 years with an average of five years

experience working with special needs students. The sample teachers had had a mean of 2.4 courses in special education and approximately half had masters degrees.

Sixty-eight percent of the teacher sample reported having at least three students with I.E.P.s; 35 percent of the sample had more than four students in their classrooms with I.E.P.s. The participating teachers represented 30 schools and seven communities.

Mainstreamed Student Selection

Participating teachers were initially asked to complete forms providing specific information on their mainstreamed students. For the purposes of this project, mainstreamed students were defined as those students who had an Individualized Education Program (I.E.P.) and spent any time in a regular classroom. Teachers were to indicate the portion of the day each student was mainstreamed and the subject area(s). They also listed the type of special services provided, such as special class placement, resource-room program, speech and language, etc. From these data sheets a single student was selected to be "tracked" in each classroom.

Data were compiled for all mainstreamed students and classification categories were determined based on the type of services received and amount of time spent in the regular classroom. The mainstreamed student sample was then randomly selected to represent these categories proportionately. Since it was also necessary to observe the selected student during the reading/language arts block in the regular classroom, some substitutions were required when the selected student could not be observed.

Mainstreamed Student Description

The descriptive breakdown for the final mainstreamed student sample is provided in Table 1. In four classrooms there were no

Insert Table 1 about here

students with I.E.P.s, thus a student who was in referral and would likely receive special services at a later date was selected. The majority of the students in the sample were primarily classified as learning disabled (93 of 118). Three were behaviorally disordered, 17 were speech impaired, and one mainstreamed student was hearing impaired.

Representative Regular Student Selection

The overall design incorporated comparison of mainstreamed students with their regular classroom peers for some variables. In order to provide a representative sample of regular students, the sample was selected from ability groups for reading. Teachers were provided with specific procedural steps to ensure random selection. Three students were selected in each classroom to represent a low, average and high ability student in reading.

Training of Observers

During the Fall, four observers with regular and special education classroom experience were selected. Training occurred during the two-month period prior to beginning the classroom observations for the teacher sample. The observers were trained to use three

data recording instruments (Academic Learning Time, Questioning Patterns, and Intervention Strategy Record) and one rating scale (Observer Rating Scale) to be recorded in the classroom setting.

During initial training, typed scripts and audio cassettes of actual classroom dialogue were used for practice sessions. When observers became proficient using the coding systems, video tapes and direct observation in classrooms were used to provide further experience with the instruments. To ensure thorough knowledge of the use of the instruments and to establish inter-coder agreement, three criterion measures were taken. These were conducted in actual classrooms with all four observers coding simultaneously.

RESEARCH DESIGN

Teacher, Student, and Contextual Variables Considered

The original study of the identified effective teachers considered 68 teaching behaviors and six attitudinal variables. Ultimately 42 of the teaching behaviors and an additional four teacher attitude variables were determined to be characteristic of the teachers effective with mainstreamed students. The identified variables are indicated in Figure 1.

Insert Figure 1 about here

For this phase of the study, budgetary and time constraints prohibited the inclusion of all the 46 previously identified variables. An attempt was made to include as many variables as possible while limiting the hours of observation required as well as teacher time necessary for completion of project instruments and questionnaires.

Ultimately 33 teaching behaviors and one teacher attitude variable were retained for data collection purposes during this final phase.

Observation Schedule

Classroom observations began in January and continued for 15 weeks, exclusive of school vacation periods. Each instrument was coded on four occasions. Table 2 provides specific information on the amount of coding time for each instrument.

Insert Table 2 about here

Instrumentation

The new data collection scheme necessitated the inclusion of several instruments not used in the initial phase. All of the classroom observation instruments as well as several of the teacher self-report instruments were used in the first phase of the study. The new instruments and questionnaires provided data on teacher background and training, classroom and school context, and characteristics, programming, and performance of mainstreamed students. A grand total of 69 variables have been included in the design. A variable list with the corresponding data collection instrument is given in Figure 2.

Insert Figure 2 about here

RESULTS

For this phase of the data analysis, the design considered the relationship of the use of the identified teaching variables to the success of the mainstreamed student, controlling for specific student characteristics. The following 21 performance measures for the selected mainstreamed students were considered: reading achievement, social status, self-perception of peer acceptance, maladaptive behavior (total score) and 11 individual behavioral factors, and off-task rate, easy difficulty level, student transition time, teacher transition time, waiting-for-help time, and academic learning time (ALT). The reading achievement score was a grade equivalent obtained from a standardized reading achievement test administered pre and post. Since achievement testing was performed by school personnel as part of their local testing program, students were administered either the Metropolitan Achievement Test, the Comprehensive Test of Basic Skills, or the Iowa Test of Basic Skills. Social status and self-perception scores were from the Perception of Social Closeness Scale, a group-administered sociogram which required each student to make a judgement for every student in their class relative to the level of acceptance they felt toward them. All responses for the mainstreamed child were considered collectively to arrive at a peer acceptance score. The mainstreamed child's self-rating on the scale was used independently as a measure of perception of self. Overall maladaptive behavior and individual behavior scores were from the Devereux Elementary School Behavior Rating Scale completed by the classroom teacher. Students were rated

on 47 items pertaining to their overall classroom adjustment. The items were rated on a 5 to 7-point scale measuring frequency of occurrence of the behavior. Scores on the 36 items indicative of inappropriate behavior were summed to represent a total maladaptive score. Additionally, clusters of approximately four items each yielded 11 behavioral factor scores. The remaining six academic learning time (ALT) variables were obtained from classroom observational data.

Relationship of Teacher Variables to Student Success

The research design for data collection on the ALT variables necessitated prior selection of four students in each classroom. These four students were a mainstreamed student, and a low, average, and high ability student based on reading-group placement. These ALT variables were considered both as independent and as dependent variables. As independent variables, the average score across students and occasions was used. This classroom average score for each ALT variable was considered to be representative of the instructional time provided for by the teacher and therefore a teaching variable. As dependent variables, the scores of the mainstreamed student only were used.

In order to determine the degree of relationship between each teaching behavior and the student performance measures, a series of partial correlation analyses were conducted. Based on the frequency and strength of the correlations, the following variables were selected as control variables: grade placement, sex, length of time mainstreamed, and hours of services provided. Pre-reading achievement was controlled when post reading was considered.

The first analyses considered the relationship of the teaching variables to reading achievement, peer acceptance, and self-perception of the mainstreamed child. As shown in Table 3, eight of the 34 teach-

Insert Table 3 about here

ing variables considered correlated at the .05 level or above with reading achievement. Giving positive feedback, responding supportively to low ability students, maintaining a positive relationship with students, efficient use of classroom time, and student transition time all correlated with reading achievement for mainstreamed students. Need for discipline, off-task behavior, and incidence of intervention were negatively correlated with achievement in reading. Summarizing, these results seem to indicate that a supportive, responsive atmosphere which the teacher manages efficiently such that there is little need for or actual intervention provides for a learning environment which facilitates reading performance for mainstreamed students.

Only three variables significantly correlated with peer acceptance. Giving sustaining feedback, that is asking subsequent clarifying questions to students making incorrect responses, correlated positively with peer acceptance of the mainstreamed child. Likewise, criticizing incorrect student responses was negatively related to peer acceptance. It appears that the feedback which students receive from the teacher affects their acceptance of others. That is, in classrooms where students receive corrective, non-critical feedback, an atmosphere is created which is more conducive to acceptance of

mainstreamed students. A high amount of teacher transition time was also related to low acceptance.

Self-perception of peer acceptance did not significantly correlate with any of the teaching behaviors examined. These results could be interpreted to mean that mainstreamed students' perception of their acceptance is unrelated to specific teaching behaviors, or that it is more influenced by other factors.

Table 4 includes those teaching variables having two or more significant correlations with either the academic learning time (ALT)

Insert Table 4 about here

variables and/or the behavioral factors. One behavioral factor, need closeness to teacher, had no significant correlations. ALT and easy difficulty level for the mainstreamed student were expected to correlate positively with teaching variables advocated for high usage; off-task rate, teacher and student transition time, and waiting-for-help time were expected to correlate positively with variables advocated for low usage. Of the behavior variables, comprehension and creative initiative were expected to correlate positively with variables recommended for high usage and negatively with those recommended for low usage; the opposite was true for the other nine maladaptive behavior scores.

Instructional appropriateness significantly correlated with four of the six ALT variables. Positive feedback, correct student response, punitive intervention, and incidence of intervention all

significantly correlated with three of the ALT variables in the desired direction. Two variables, supportive response to low ability students and total punitive response were not related to any of the ALT variables.

Considering the behavior variables, supportive response to low ability students significantly correlated with eight of the behavioral factors, correct student response significantly correlated with seven behavioral factors, and total supportive response with six.

In an attempt to summarize the results, Table 5 is presented.

 Insert Table 5 about here

This table includes all teaching variables having meaningful significant correlations with the student performance measures. Of the five categories of student performance considered, a maximum of three categories correlated with any one teaching variable. Four teaching behaviors had significant correlations with performance in three areas. Use of sustaining feedback correlated with social status, ALT, and a behavioral factor. Off-task rate, incidence of intervention, and student transition time correlated significantly with reading achievement, ALT variables, and a behavioral factor.

Two variables, instructional appropriateness and content questions, had significant correlations only with academic learning time variables which would be expected by definition of the variables. Since no other significant correlations with the other performance measures were revealed, these two variables do not warrant recommendation without further study. In summary, a total of 15 teaching variables have been

identified in terms of their relationship to the successful performance of mainstreamed students. Those variables are as follows:

- (1) providing positive feedback,
- (2) giving sustaining feedback,
- (3) responding supportively to students (in general),
- (4) responding supportively to low ability students,
- (5) responding supportively to learning problem behaviors,
- (6) asking questions which receive correct student response,
- (7) easy difficulty level of tasks,
- (8) efficient use of time,
- (9) incidence of intervention (low rate),
- (10) punitive intervention (low rate),
- (11) punitive response (low rate),
- (12) criticism of response (low rate),
- (13) need for discipline (low rate),
- (14) student transition time (low rate),
- (15) off-task time (low rate).

Recommendations for Teacher Training

In terms of recommendations for teacher training, it is recommended that teachers be trained to provide positive feedback to students responding to questions, give sustaining feedback when students answer incorrectly, ask questions during instruction which are answered correctly by students, and refrain from criticizing student responses; and provide instructional materials and tasks which students appro-

priately engage in at a low error rate. Furthermore, it is recommended that teachers working with mainstreamed students provide a supportive classroom environment in which there is little student transitional or non-instructional wait-time, need for discipline as well as actual intervention rate is low, and use of punitive interventions is minimal.

Table 1

**Description of Services for the Mainstreamed Student Sample
(n = 118)**

Placement and Services Provided	Number of Students
Placed in a self-contained special education class and mainstreamed into a regular classroom	13
Placed in a regular classroom and provided services in a resource room program	60
Placed in a regular classroom and provided with both resource room and speech and language services	15
Placed in a regular classroom and receiving only speech and language services	21
Placed in a regular classroom and receiving no direct services for academic subjects	5
In referral process but currently receiving no services (no I.E.P. as yet)	4

Table 2

Data Collection Schedule for Classroom Observations

Instrument	Length of Each Observation (in minutes)	Number of Observations	Total Time (in minutes)
Questioning Pattern (QP)	15	4	60
Intervention Strategy Record (ISR)	42	4	168
Academic Learning Time (ALT)	45	4	180
Observer Rating Scale (ORS)	60	4	240

Figure 1

Teaching Variables^a

QUESTIONING STYLE

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Volunteer Respondent (QP)
Student Selection (QP)
Narrow Questions (QP)
* Positive Feedback (QP)
* Sustaining Feedback (QP) | * Content Questions (QP)
* Low-order Questions (QP)
* Correct Student Response (QP)
** Criticism of Response (QP) |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|

CLASSROOM CLIMATE

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Movement-Free vs. Restricted (SOI)
Affective Environment (TOI)
Physical Environment (CM)
Noise Level Appropriateness (SI)
Non-Permissiveness (ORS)
Controlling Behavior (TOI)
Acceptance of Feelings (ORS) | Awareness of Feelings (ORS)
* Warmth (SI)
* Teacher Responsiveness (ORS)
* Teacher Fairness (ORS)
* Performance Expectation (ORS)
* Relationship with Students (ORS)
* Initiation of Student Contact (ORS) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

INDIVIDUALIZATION

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Time in Small Groups (SOI)
Time in Large Groups (SOI)
Teacher Time with Individuals (SOI)
Individualization of Work (SOI)
Grouping for Math (BI) | Checking Student Work (ORS)
* Ad Hoc Grouping (CM)
* Instructional Appropriateness (ORS)
* Grouping for Reading (BI)
* Attention to Individual Needs (SI & CM) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CLASSROOM MANAGEMENT

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supportive Response to Conduct Problems (ISI)
Supportive Response to High Severity Behavior (ISI)
Teacher Consistency (ORS)
Use of Praise (ORS)
* Supportive Response to Learning Problems (ISI)
* Supportive Response to Personality Problems (ISI)
* Supportive Response to Low Ability Students (ISI)
* Effective Use of Time (ORS) | * Total Supportive Response (ISI)
* Task Engagement Feedback (ISR & ISI)
* Variety of Interventions (ISI)
* Need for Discipline (ORS)
* Total Punitive Response (ISR)
* Punitive Intervention (ISR)
** Incidence of Intervention (ISR) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

ACADEMIC LEARNING TIME

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allotted Time (DR)
Teacher Directed Time (ALT)
Student Directed Time (ALT)
* Easy Difficulty Level (ALT)
* Engagement Rate (ALT)
* Academic Learning Time (ALT & DR)
** Special Individual Work Time (DR) | ** Unassigned Time (DR)
** Teacher Transition Time (ALT)
** Student Transition Time (ALT)
* Waiting-for-Help Time (ALT)
* Off-Task Time (ALT)
** Hard Difficulty Level (ALT) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

TEACHING STYLE

- | | |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Assignment of Tasks (SOI)
Assignment of Homework (CM)
* Teacher Flexibility (TOI)
* Lesson Structure (CM) | * Clarity (SI & ORS)
* Academic Feedback (CM)
* Active Involvement (SOI & ORS) |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

OPINION AND ATTITUDINAL VARIABLES

- | | |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Situational Job Satisfaction (JSQ & EDS)
Educational Philosophy (TOI)
* Positive Attitude Toward Mainstreaming (TQM) | * Professional Job Satisfaction (JSQ & EDS)
* Scope of Professional Responsibility (TOI)
* Teacher Self-Perception of Competence (EDS) |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|

- ^a *Initials following each variable indicate the instrument used.*
 * *High amount characteristic of effective teachers.*
 ** *Low amount characteristic of effective teachers.*

Figure 2
Project Variable List

<u>Instrument</u>	<u>Variable</u>
Questioning Patterns	Content Questions
	Low-order Questions
	Correct Student Response
	Criticism of Response
	Positive Feedback
	Sustaining Feedback
Academic Learning Time	Teacher Transition Time
	Student Transition Time
	Waiting for Help Time
	Off-Task Time
	Easy Difficulty Level
	Hard Difficulty Level
	Engagement Rate
	Academic Learning Time
Intervention Strategy Record	Task Engagement Feedback
	Incidence of Intervention
	Punitive Intervention
Observer Rating Scale	Instructional Appropriateness
	Teacher Responsiveness
	Teacher Fairness
	Performance Expectation
	Relationship with Students
	Initiation of Student Contact
	Efficient Use of Time
	Need for Discipline
	Teacher Clarity
	Active Involvement
Intervention Strategy Inventory	Total Supportive Response
	Supportive Response to Learning Problems
	Supportive Response to Personality Problems
	Supportive Response to Low Ability Students
	Variety of Interventions
	Total Punitive Response
Teacher Questionnaire	Grade Level
	Class Size

<u>Instrument</u>	<u>Variable</u>
Teacher Questionnaire (cont.)	No. of Mainstreamed Students
	Ratio of Mainstreamed Students to Regular
	Time Allotted to Reading/Language Arts
	No. of Reading Groups
	Years of Teaching Experience
	Highest Degree
	Years of Experience with Mainstreamed Students
	Special Education College Courses
	Special Education Inservice Courses
	Rating of Administrative Support
	Rating of Support Services
	Rating of Success with Mainstreamed Students
Mainstreaming Attitude Survey	Positive Attitude Toward Mainstreaming
I.E.P. Data Record	Amount of Time with Resource Teacher (and/or Specialist)
	Length of Time Mainstreamed
	Length of Time with an I.E.P.
	Type of Handicapping Condition
	Mainstreamed Student's Age
	Reading Achievement Pre-test
Devereux Elementary School Behavior Rating Scale	Maladaptive Classroom Behavior (Summative score)
	Factor scores for:
	(1) Classroom Disturbance
	(2) Impatience
	(3) Disrespect - Defiance
	(4) External Blame
	(5) Achievement Anxiety
	(6) External Reliance
	(7) Comprehension
	(8) Inattentive - Withdrawn
	(9) Irrelevant - Responsiveness
	(10) Creative Initiative
	(11) Need Closeness to Teacher
Sociogram	Social Status or Peer Acceptance
	Self-rating of Peer Acceptance
Standardized Reading Achievement Test	Reading Achievement Pre and Post

Table 3
Significant Correlates of Reading Achievement and Social Status

Teacher Variable	Reading Achievement	Peer Acceptance
Positive Feedback	**	
Sustaining Feedback		*
Supportive Response to Low Ability Students	*	
Relationship with Students	*	
Easy Difficulty Level		
Content Questions		
Efficient Use of Time	**	
Incidence of Intervention	(-)*	
Criticism of Response		(-)*
Need for Discipline	(-)**	
Off-Task Rate	(-)**	
Teacher Transition Time		(-)*
Student Transition Time	(-)*	

* $p < .05$; ** $p < .01$.

Note: Correlation coefficients ranged from .21 to .37.

Table 4

Significant Correlates of ALT and Behavior Measures

Teacher Variable	Student Variable																
	Academic Learning Time (ALT) ^a						Behavior ^b										
	ALT	EDL	OTR	TT	ST	WHT	CD	DD	I	IR	EB	ER	IW	AA	T	C	CI
Positive Feedback	*	*	(-)*														
Sustaining Feedback	*																**
Supportive Response to Low Ability Students							(-)**		(-)*	(-)*	(-)*		(-)**	(-)*	(-)**	**	
Supportive Response to Learning Problems			(-)**				(-)*						(-)*				
Total Supportive Response			(-)*				(-)**		(-)*	(-)*			(-)**		(-)*	*	
Content Questions		**				(-)**											
Correct Student Response	*	**			(-)*		(-)*	(-)*		(-)*	(-)**		(-)*		(-)*	*	
Easy Difficulty Level	**												(-)*				
Instructional Appropriateness	**	*	(-)**			(-)*											
Efficient Use of Time	*		(-)**														
Incidence of Intervention	(-)*		**	**								*					
Punitive Intervention	(-)*	(-)*		**													
Total Punitive Response							**		**	**			**		**	(-)*	
Need for Discipline	(-)*		**						*					*			
Off-Task Rate	(-)*			*								*					
Student Transition Time	(-)*		**				*										

* $p < .05$; ** $p < .01$ ^aALT = Academic Learning Time; EDL = Easy Difficulty Level; OTR = Off-Task Rate; TT = Teacher Transition; ST = Student Transition; WHT = Waiting-for-Help Time.^bCD = Classroom Disturbance; DD = Disrespect-Defiance; I = Impatience; IR = Irrelevant Responsiveness; EB = External Blame; ER = External Reliance; IW = Inattentive-Withdrawn; AA = Achievement Anxiety; T = Total Maladaptive Score; C = Comprehension; CI = Creative Initiative.

Note: Correlation coefficients ranged from .18 to .36.

Table 3
Significant Correlates of Mainstreamed Student Measures

Teacher Variable	Mainstreamed Student Performance			
	Reading	Social Status	ALT Variable ^a	Behavior Variable ^b
Sustaining Feedback		X	ALT	CI
Positive Feedback	X		ALT, EDL, OTR(-)	
Easy Difficulty Level			ALT	IW(-)
Correct Student Response			ALT, EDL, ST(-)	T(-), CD(-), DD(-), IR(-), EB(-), IW(-), C
Student Transition Time	X(-)		ALT(-), OTR	CD
Off Task Rate	X(-)		ALT(-), TT	ER
Incidence of Intervention	X(-)		ALT(-), OTR, TT	ER
Punitive Intervention			ALT(-), EDL(-), TT	
Criticism of Response		X(-)		
Total Punitive Response				T, I, CD, IW, IR, C(-)
Supportive Response to Low Ability Students	X			T(-), CD(-), I(-), EB(-), AA(-), IW(-), IR(-), C
Supportive Response to Learning Problems			OTR(-)	CD(-), IW(-)
Total Supportive Response			OTR(-)	T(-), CD(-), IW(-), I(-), IR(-), C
Need for Discipline	X(-)		ALT(-), OTR	
Efficient Use of Time	X		ALT, OTR(-)	

^aALT = Academic Learning Time; OTR = Off-Task Rate; EDL = Easy Difficulty Level; ST = Student Transition; TT = Teacher Transition; WHT = Waiting-for-Help Time.

^bT = Total Maladaptive Score; CD = Classroom Disturbance; I = Impatience; DD = Disrespect-Defiance; EB = External Blame; AA = Achievement Anxiety; ER = External Reliance; IW = Inattentive-Withdrawn; IR = Irrelevant Responsiveness; C = Comprehension; CI = Creative Initiative.

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